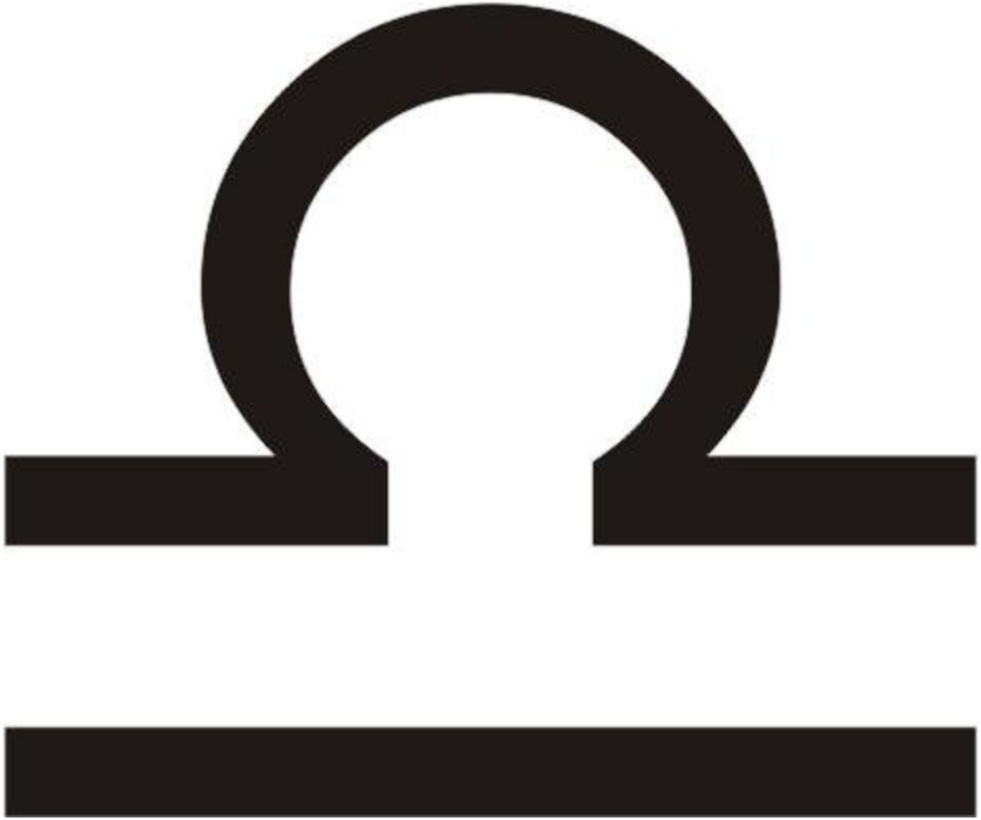
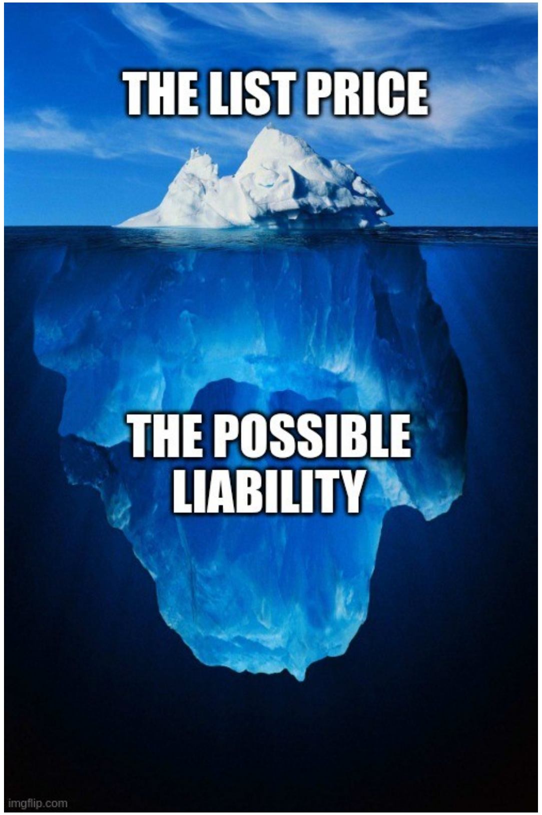
# BSP & SEC Workshop Day 2

## Measuring Value Into Existence Using Bitcoin

# Morning Session



# The Value Iceberg



- The value of an asset is not determined by ‘good’ or ‘bad’
- The value of an asset is determined by its value proposition
- An iceberg can be a danger and a valuable resource
- It all depends on our perspective and capability

# Smartphones

VS

# Fairphone

- Fairphone is a recognition of the complete value proposition of the Smartphone Market
- Materials are ethically sourced, every component can be replaced and repaired independently
- Buyers sacrifice on polish, fashion and features in order to buy into the reality and to be more resilient

# OK, So What?

- No rational economic system undermines its own principles or the very life support systems bequeathed to us for free
- We trample on Human Rights and on Mother Nature to compete with each other for more megapixels on our cameras and higher resolutions on our screens
- We destroy more value than we create, because the market is blinded to the nature of the competition

# The Value Island

- Money is of little use under conditions of moral hazard and distrust
- Even those who find dry land and ‘win’ do so at great cost to themselves and others

# What We Aren’t Measuring Now

- $3 trillion of waste disposal that the Earth does for mankind every year
- Enormous loss of plant and animal life
- Soil nutrient and micro-biome depletion
- Canfield Ocean and Ocean Acidification
- ‘Forever chemicals’ in every body of water and drop of rain on Earth
- The mothers who produce every taxpayer and worker
- The self-discipline, compassion and empathy underpinning all productive collaboration

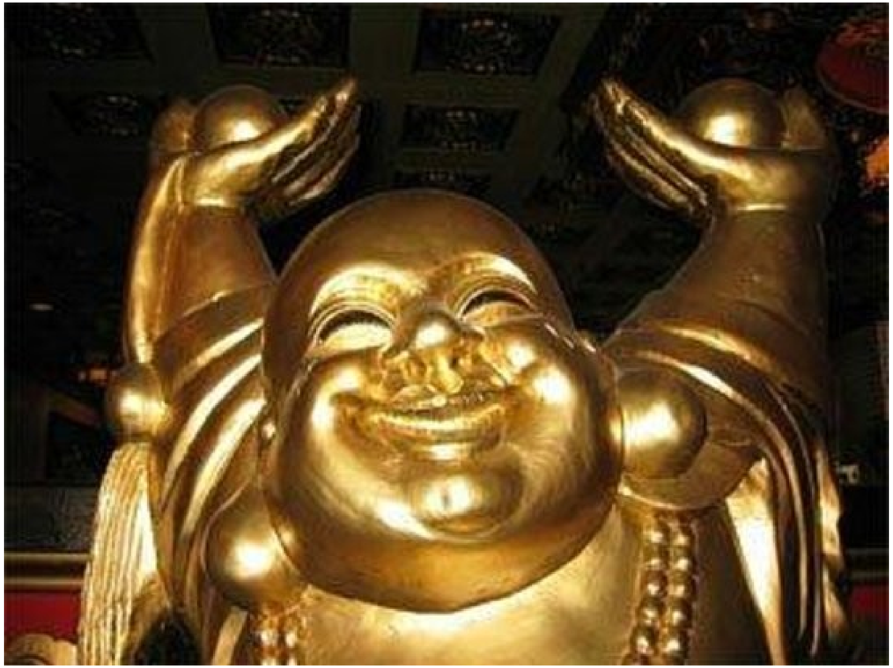
# The Value Loch Ness

- Myth and mystery surrounding the Loch Ness Monster attracts many tourists to Scotland every year
- Is the Loch Ness Monster real?
- How much does it matter?
- Every culture, every nation, has its myths, mysteries and legends and we’re all free to choose what we believe and what we don’t
- These things define us, and perhaps speak to the broader principle that we all know less about the world than we believe that we do.

# We Can’t Know What We Can’t Know We Don’t Know

- Big Data knows more about us than ourselves, our families and our friends do
- This apparatus is used to feed conspiracy theories, misinformation and 5th Generation Warfare
- This apparatus then profits from chaos and disaster by manipulating the fears of populations, demographics and individuals.

# The Value Yamashita’s Gold

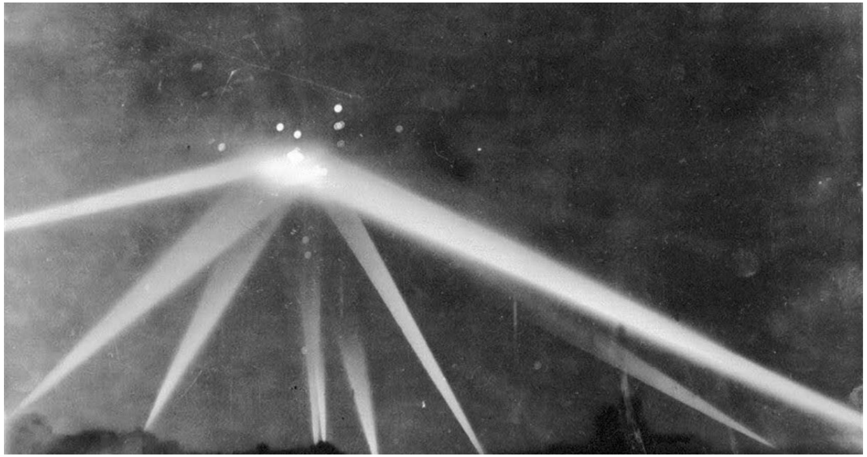


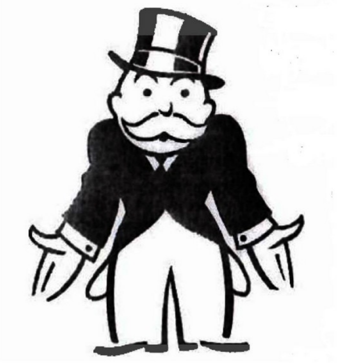
- Salamat Po
- Whatever the truth of Yamashita’s Gold or the Loch Ness Monster
- The value of the Filipino people and of the Scottish people is the true value
- And there’s far more value hidden beneath the surface of the image or the ‘digital brand’ of anyone than there is hidden gold or hidden monsters underneath the surface of Loch Ness

# Bitcoin: Taking the Big Data Back

- When Big Data knows all about the material risks and the material facts at scale, but we don’t, this is Moral Hazard
- When the economic system is already undermining huge amounts of value because it can’t measure it into existence, this is Moral Hazard
- When unaccountable foreign entities have more power over a nation than its own government or its own people do, this is Moral Hazard

# UFO: Paranormal Activity or Un-Funded Opportunity?



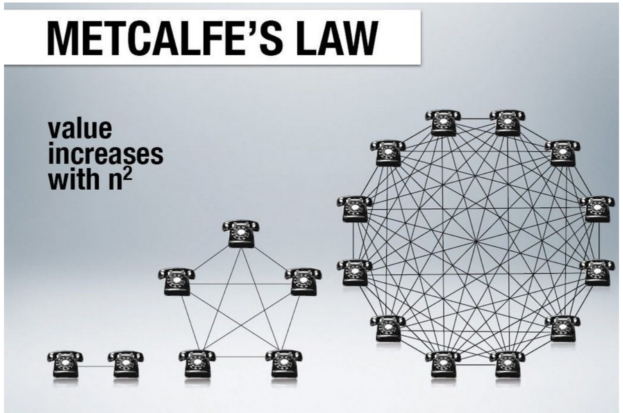


- Bitcoin is not just an opportunity to give everyone access to digital payments
- Bitcoin is an opportunity to give everyone access to funding, to reliable information, and to become resilient and strong
- Every person who doesn’t achieve their full potential is a missed opportunity that no nation can afford in the 21st century

# Competition Fetishism

- We don’t make schoolboys compete against professional men, we build development pathways and youth teams
- We have men’s and women’s sports
- We don’t replace senior staff with university graduates, we have graduate development programs
- Competition is only meaningful within a transparent and regulated context, otherwise it’s pointless at best

# Measuring Value



- When people come together to achieve their full potential together, that's where value really comes from
- Value comes from mutual respect and self responsibility at individual, organizational and national level
- Bitcoin enables this

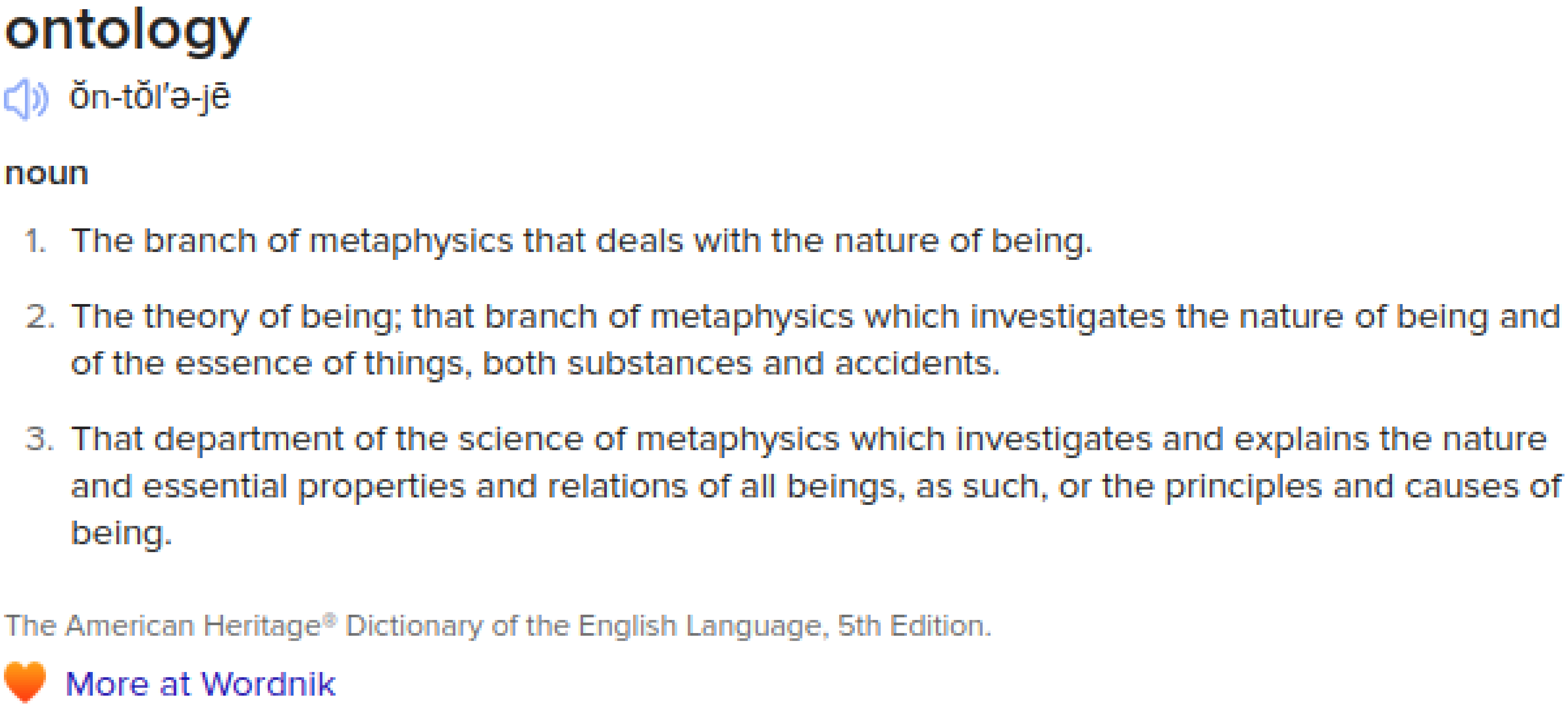
# Synergy Scales, Like Nature Does

- Markets can only yield knowledge and wisdom according to their senses
- If markets can’t see and can’t hear and have no incentive to see and hear then they’re not going to evolve further than a jellyfish or a mollusk
- The quality of knowledge and wisdom in any market can only ever proportional to its situational awareness and its ability to incorporate expertise, nuance and situational subtlety

# Breakout Session 1

- Watch Big Short/Margin Call Movie Clips
- Discuss systemic risk and how the siloing of data gave rise to information asymmetry and Moral Hazard gave rise to the fragility of the global economy in 2008

# Ontology



**ontology**

ŏn-tŏl′ə-jē

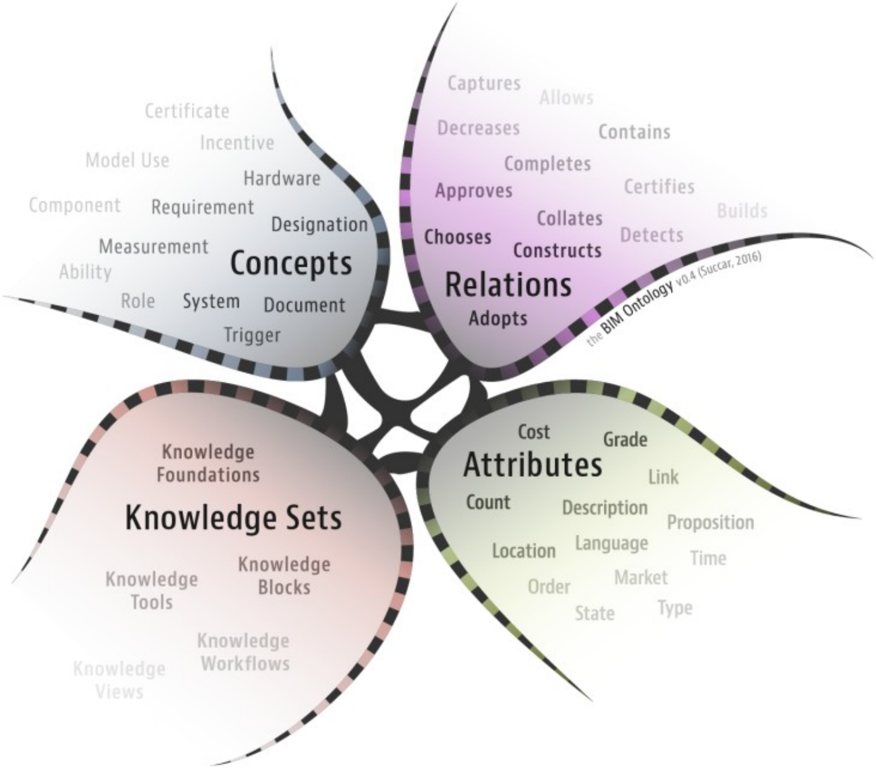
**noun**

1. The branch of metaphysics that deals with the nature of being.
2. The theory of being; that branch of metaphysics which investigates the nature of being and of the essence of things, both substances and accidents.
3. That department of the science of metaphysics which investigates and explains the nature and essential properties and relations of all beings, as such, or the principles and causes of being.

The American Heritage® Dictionary of the English Language, 5th Edition.

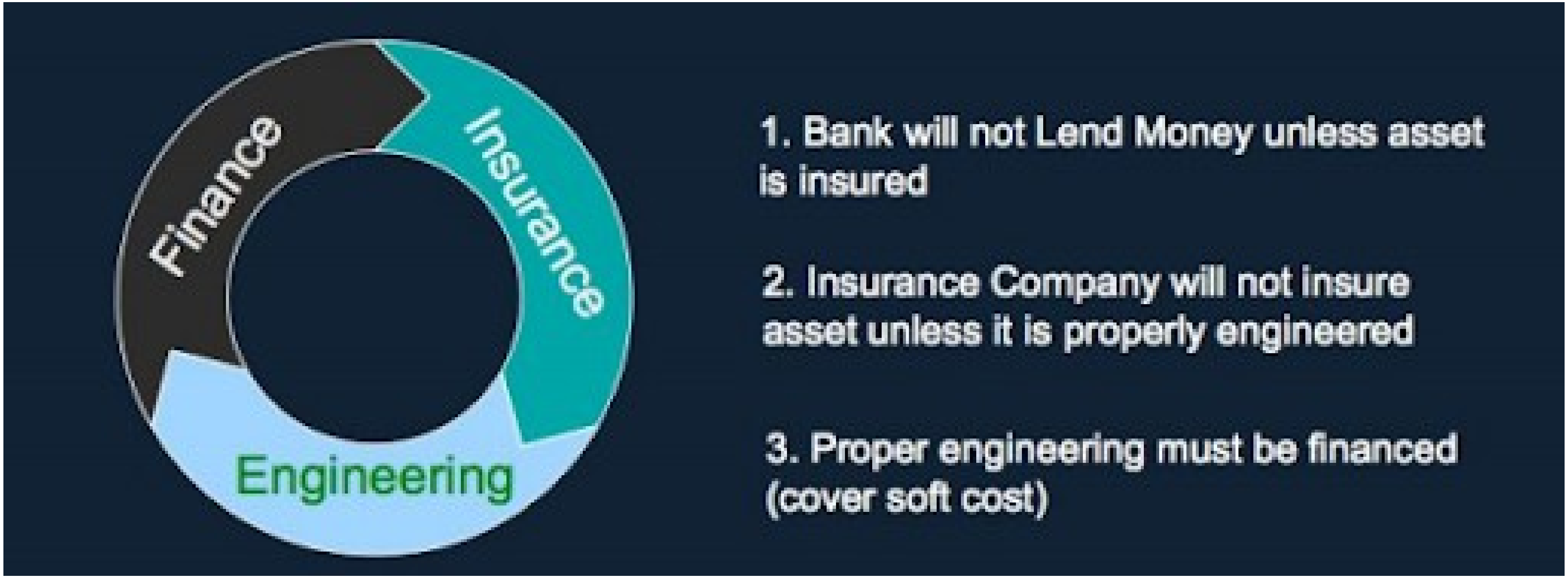
More at Wordnik

# Data Ontology



- Data drives costs, prices, risks and decisions
- Data drives both the existence and the regulation of markets
- The greater the incorporated variance and transparency of data pertaining to risk, the clearer the value proposition, the more liquid the market
- Variance itself is neither good nor bad, variance just explains the value proposition in trade

# The Virtuous Data Ontology Circle

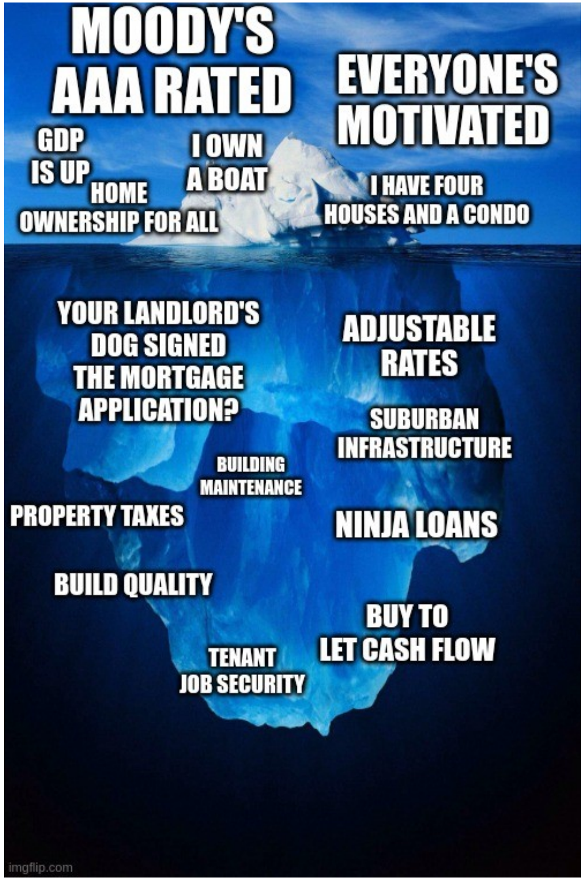


1. Bank will not Lend Money unless asset is insured

2. Insurance Company will not insure asset unless it is properly engineered

3. Proper engineering must be financed (cover soft cost)

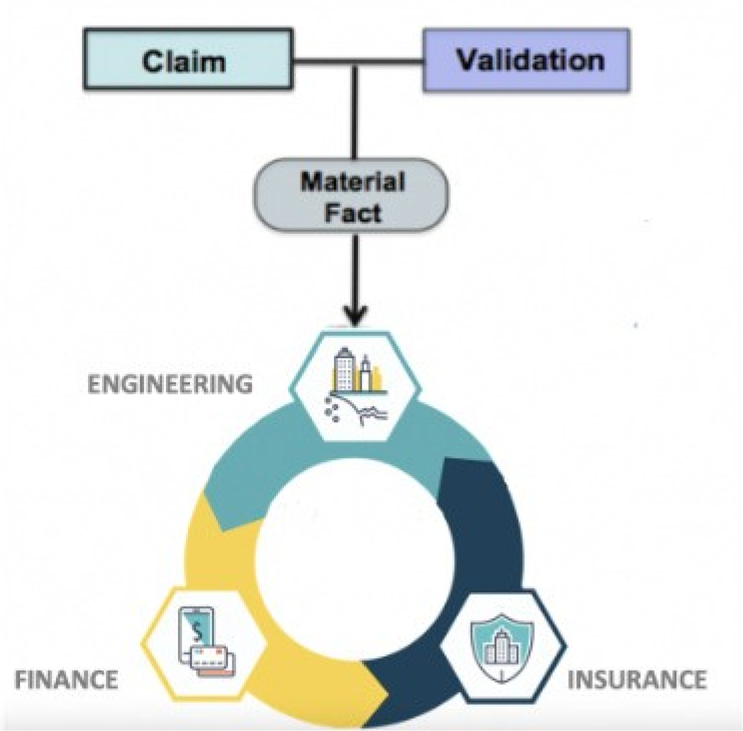
# Tokenized Mortgage Backed Securities



# Bitcoin is Disrupting Markets

- Tokenized MBS and Private Market Assets are already a huge growth industry
- Bitcoin allows for greater transparency of data, which marks assets to market more efficiently and more effectively
- Thus these markets are have greater resilience and are attracting more volume,depth and quality of liquidity
- Bitcoin is creating markets for data that was previously more convenient to sweep under the rug in the pre-Bitcoin era

# Industry 4.0, 5.0… Web 3.0, 4.0...



- The technology industry is awash with confabulation, jargon, buzzwords
- Industrial Metaverse, Digital Twins, Artificial General Intelligence, CBDCs, Digital Signatures and Identities, Industry 4.0, 5.0, 6.0, 7.0, Web 3.0, 4.0, 5.0
- What does it all mean, in real life?
- All that it means is that engineering signatures and identities adjudicate between the real world and the digital world with respect to project investment
- Bitcoin allows for attestation data of physical systems to be recorded into the financial system within the same permission-less Data Ontology

# Data is not a Scarce Resource

- The world is awash with data but also within a context of poverty of meaning
- The world is awash with competition but also within a context of poverty of context
- Just because an autonomous drone can turn a man into a corpse more easily than a man can shoot it out of the sky isn’t the market giving us any intelligence about anything, it’s just Artificial General Stupidity
- Bigger, better, faster paperclip maximisers aren’t innovative

# Technological Innovation

- Innovation is responsible for 80% of economic growth according to Robert Solow
- Bitcoin allows us to change our factors of production from Space, Work and Time, the 18th century Adam Smith model
- With Bitcoin we can measure innovation into existence more directly as the process of turning data data into information (meaning), information into knowledge (context) and so forth to produce innovation from data as opposed to just winners and losers in a pointless game
- With Bitcoin we can re-calibrate the data market into a learning and teaching environment about all kinds of material facts and risks

# Breakout Session 2

- What barriers currently exist between the state of assets and collateral from an engineers' perspective, vs the state of assets and collateral from a central bank or securities regulation perspective? How much direct visibility and statistical significance of that data is there?
- How is this data currently silo-ed, and what is the current hierarchy of that data?
- From inspection, what are your opinions with respect to this model of finance and investment
- For those familiar with the work of Robert Solow, how does the above relate to Solow's view of economic growth primarily coming as a result of technological improvement? Agree or disagree?

# In Conclusion

- A bad credit rating is better than no credit rating
- Accurate data about a dilapidated asset is better than no data about any asset.
- People would rather often hide, lose or not share data that makes themselves or their own group look bad, or 'memory hole' data about mistakes in the past.
- This is in addition to structural ineffectiveness in terms of current prevailing Data Ontology.
- Bitcoin can create new incentives to ensure that ensure that there's an logical economic reason to share more data, with no possibility for a 'memory hole' or at the very least proof that data was lost at a specific time, under the control of a specific identity.
- We'll explain a bit about this in the next session.

# 15 Minute Morning Tea Break

# Day 1 Recap: Immutability

- Defined as resistance to change or alteration, immutability is the silent guardian of data integrity in a digital world where information moves at the speed of light.
- Imagine having secure, digitized versions of essential documents and records that are impervious to unauthorized alterations. Immutability makes this possible, laying a firm foundation of trust in our digital interactions.
- With the advent of blockchain, we've gained the ability to create something truly scarce in the digital realm.
- It’s not about creating rare digital art, but about tokenizing real-world assets.
- Consider a piece of land, a precious gem, a historical artifact, or any other valuable real-world asset. The token on the blockchain can represent this asset in the digital world, providing an immutable record of its existence, ownership, and provenance.

# Day 1 Recap: OK, So What?

- The concept of immutability is revolutionizing how we perceive and interact with the digital world. It's a game-changer, with the potential to redefine how we establish trust, assert ownership, and handle transactions in various industries, including banking and finance, real estate, supply chain management, and more

# Day 1 Recap: Timestamp Server

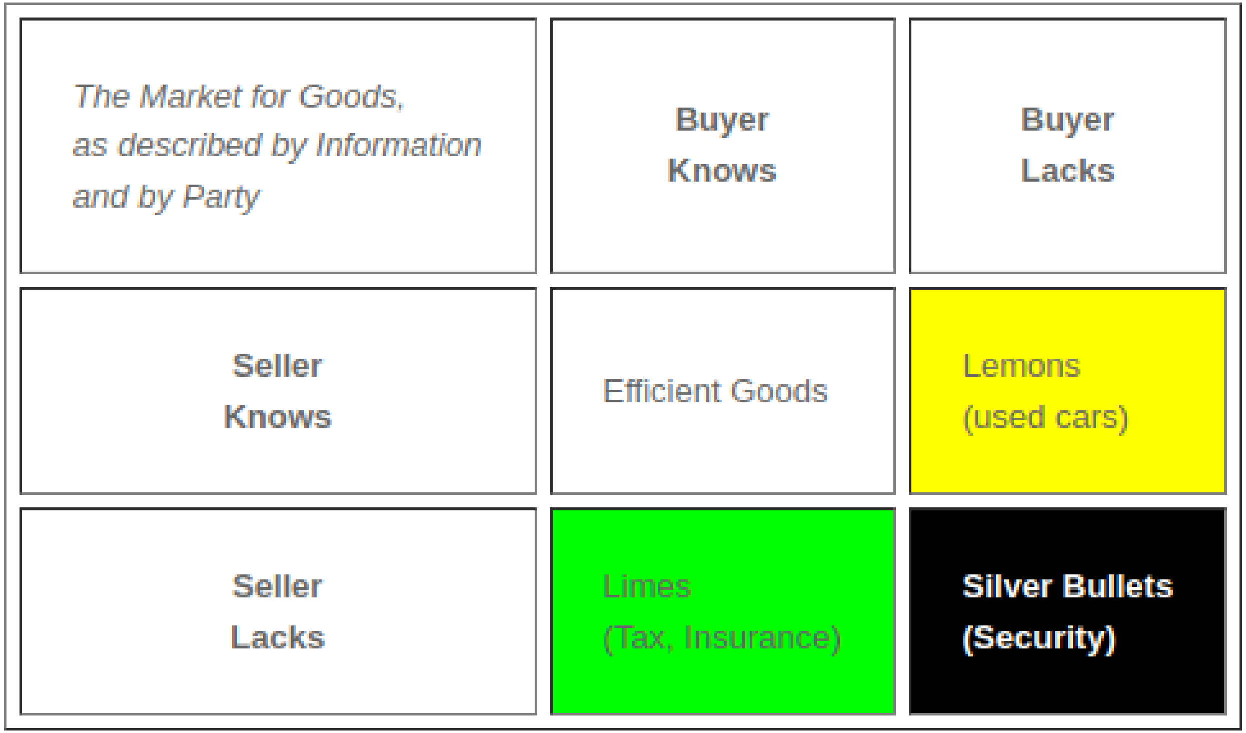
- A Timestamp Server is a specialized database system that records event 'e' and timestamp 't', providing verifiable evidence that event 'e' occurred prior to time 't'.
- Bitcoin is a data ‘check valve’ the data cannot be changed backwards in time, just like real life

# Breakout Session

- Currently problems with databases in the current paradigm are siloed information, and that the ontology of the databases often drives markets, rather than thinking about how the risk data should fit together, in a statistically significant and effective way, to manage risk and market liquidity at scale.
- Given the brief summary of what Bitcoin does, the unique problem it solves with respect to how we broadly currently manage data, spend an hour in groups with facilitators, thinking about how Bitcoin could create better incentives around sharing risk data for a specific private market use case: real estate, gemstones, metals and ores, timber, or even oil.
- Facilitators will help to guide you, don't be afraid to ask questions. Think in terms of how you understand these markets currently working, how data is typically managed, what the supply chains currently look like, and think of at least one way in which Bitcoin can substantially improve both market efficiency and effectiveness, in line with the general premises of Human Rights, environmental and sustainability goals and so forth.

# 1 Hour Lunch Break

# Afternoon Session 1



| *The Market for Goods,*<br>*as described by Information*<br>*and by Party* | **Buyer Knows** | **Buyer Lacks** |
|---|---|---|
| **Seller Knows** | Efficient Goods | Lemons<br>(used cars) |
| **Seller Lacks** | Limes<br>(Tax, Insurance) | **Silver Bullets**<br>**(Security)** |

Figure 1. Security is a Symmetrically Insufficient Market

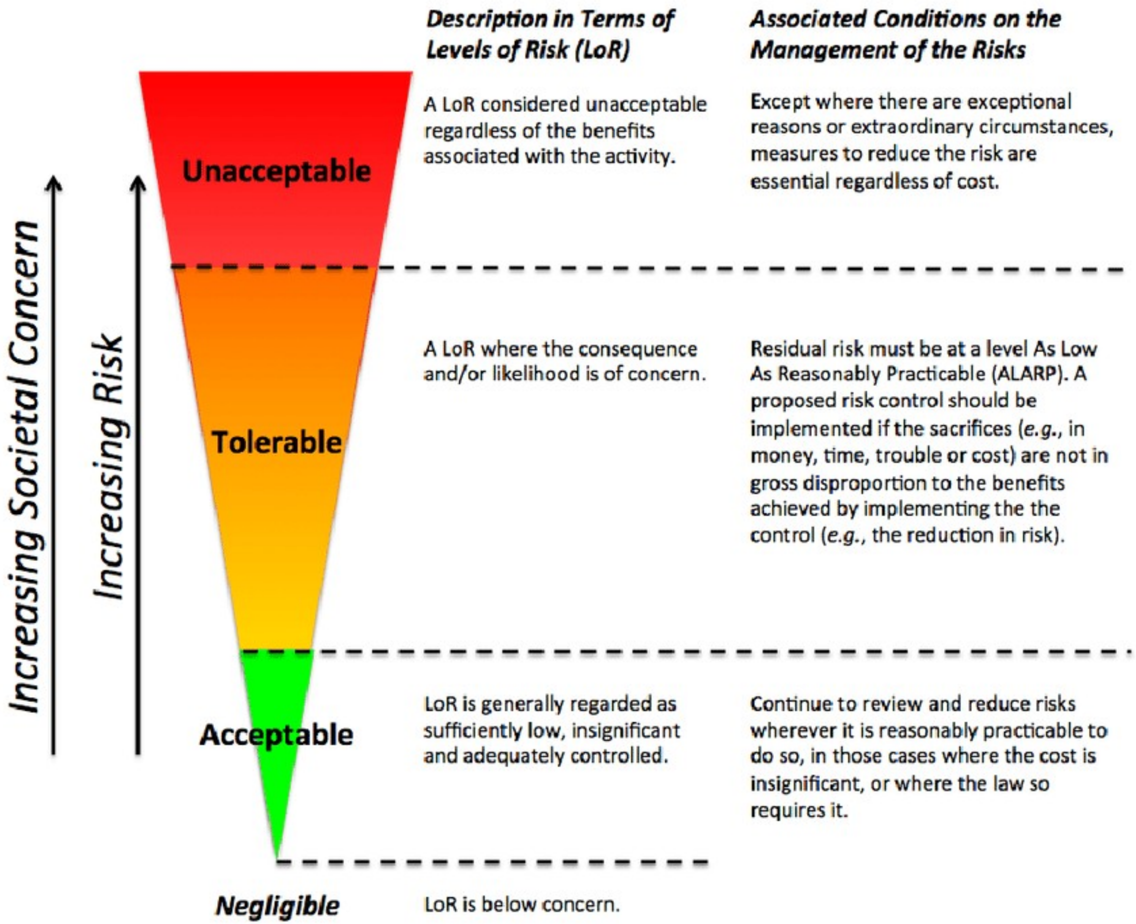
# Insufficient Symmetry or Trustless?

- Under UK engineering safety regulations, the possibility of a catastrophic event within a a complex system capable of producing a Major Accident Hazard is Zero
- Under pre-existing best practices, Bitcoin when interacting with physical systems is no different
- Trustless doesn’t mean higher walls, more locks, more CCTV, more paranoia, trustless means transparent variance according to transparent reputations

# Market Self Regulation is Anti-Fragile Investment

- Nassim Taleb is neither a Supervillain nor Superhero, he’s a man explaining a certain value proposition pertaining to risk and risk perception
- Value Propositions have nothing to do with good or bad
- For fat tail things, we need fat tail sorts of strategies and people, heterodox thinkers, geniuses, and ones who really act on principle
- This is no different to the ALARP principle in safety regulations

# ALARP Framework



| | *Description in Terms of Levels of Risk (LoR)* | *Associated Conditions on the Management of the Risks* |
|---|---|---|
| **Unacceptable** | A LoR considered unacceptable regardless of the benefits associated with the activity. | Except where there are exceptional reasons or extraordinary circumstances, measures to reduce the risk are essential regardless of cost. |
| **Tolerable** | A LoR where the consequence and/or likelihood is of concern. | Residual risk must be at a level As Low As Reasonably Practicable (ALARP). A proposed risk control should be implemented if the sacrifices (*e.g.*, in money, time, trouble or cost) are not in gross disproportion to the benefits achieved by implementing the the control (*e.g.*, the reduction in risk). |
| **Acceptable** | LoR is generally regarded as sufficiently low, insignificant and adequately controlled. | Continue to review and reduce risks wherever it is reasonably practicable to do so, in those cases where the cost is insignificant, or where the law so requires it. |
| ***Negligible*** | LoR is below concern. | |

# Innovation as Anti-Fragile Investment

- Innovators most often emerge from the fringes of the societal distribution curve
- Sisyphus and Jesus Christ: The Scapegoat Principle
- We don’t know what 2050 will look like, but the people with the best ideas are out there, somewhere
- Will they be blamed for telling the truth and thinking differently, or will they be supported?
- Who has responsibility for ensuring that their ideas and their understandings overcome the prevailing ones?
- Disruptive innovation is always a risk to the established order, but the established order isn’t for whom societal and environmental risk should be measured for.

# Breakout Session

- What do you know about concentration of information asymmetry, the sort of concentration that leads to 'Black Swan' event or a ‘Breakthrough Innovation’?
- How might Bitcoin, knowing what you know about it, help you to measure that better, measure the higher order economic effects that markets are currently not good at managing?
- Conceptualize how Bitcoin might be used to create these systems, facilitators will help you.

# 15 Minute Afternoon Tea Break

# Open Banking

- Two Thirds of the population of the Philippines are unbanked
- Data connectivity across all of the islands is patchy
- It’s one thing giving people access to digital payments, it’s another attracting the liquidity necessary to the project to make that possible

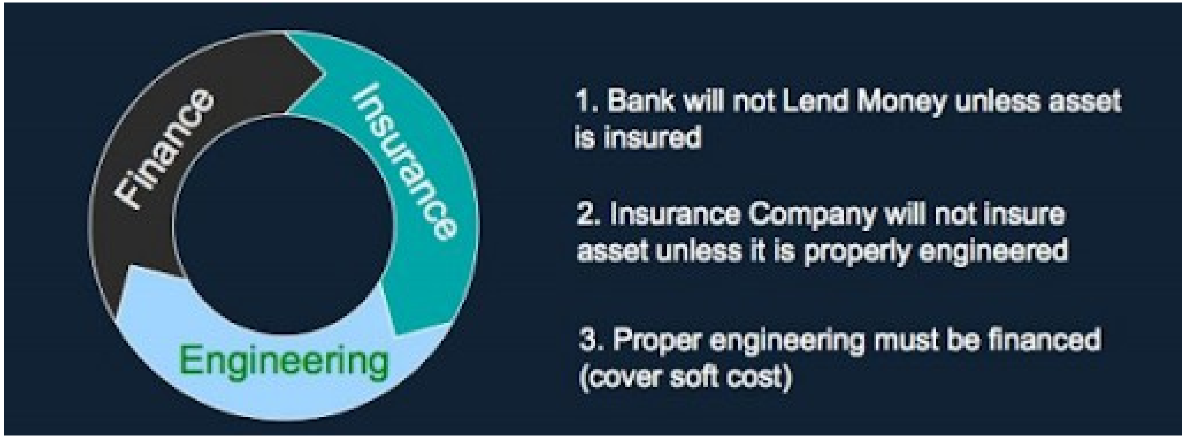
# My Banka

- My Banka links BSV Blockchain to European Open Banking APIs
- This engineering project already demonstrates the ability of Bitcoin to interface with international finance and remittance

# UNISOT

- The ‘Universal Source Of Truth’
- Also built on BSV Blockchain
- UNISOT helps to integrate digital signatures, identities and digital twins according to the criteria of insurability and existing engineering law

# MyBanka + UNISOT



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- With these two tools, it is possible to give everyone in the Philippines access to digital payments and a credit score
- To build the level of trust within the variance necessary for the project to make internet access in the Philippines universal
- To make the Philippines nation and people a resilient and anti-fragile destination for liquidity and investment, with strong and trusted reputations

# Final Breakout Session

- Without statistically significant risk data, it is impossible to provide people with credit ratings, and therefore credit. The most important part of banking, from a national perspective, isn't the ability to send and receive money, it's the ability for the national infrastructure to insure the population, using actuarial significant data, which provides liquidity for investment.
- Bitcoin is, on the surface, as peer-to-peer payment system, but as the most institutionally recognized thought leadership from the engineering and insurance industry states, as is corroborated by many fund managers and private market facilitators already, its best and highest use case is in improving the transparency around risk, in order to attract liquidity in order to manage risk better.

# Wrap Up

- Link to slides and further reading materials
- Summarise key insights from the day
- Reflect back the best learnings and comments from the Breakout Sessions
- Suggest way forward based on all this